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Via electronic mail: <a href="mailto:vendingmachines@energystar.gov">vendingmachines@energystar.gov</a>

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Re: ENERGY STAR Product Specification for Refrigerated Vending Machines Draft 2 Version 4.0

Founded in 1936, the National Automatic Merchandising Association (NAMA) is the association representing the \$25 billion U.S. convenience services industry, with its core membership being comprised of owners and operators of vending machine companies. With nearly 1000-member companies — including many of the world's most recognized brands — NAMA provides advocacy, education and research for its membership. NAMA members include nearly all of the U.S. based vending machine manufacturing community and their largest customers.

As stated in our comments to Draft 1, vending machine manufacturers and the industry are proud of the efficiency gains they have made in the last several years. Manufacturers have replaced lighting, compressors, and accessories making vending machines of today unrecognizable in terms of energy usage compared to machines of "yesterday." NAMA very much appreciates the opportunity to provide comments on the ENERGY STAR Product Specification for Refrigerated Vending Machines Draft 2 Version 4.0 and the positive working relationship that NAMA has enjoyed with ENERGY STAR for many years.

NAMA understands that subsequent to the publication of the last ENERGY STAR specification, the Department of Energy (DOE) has released new minimum efficiency requirements with some exceeding current ENERGY STAR's usage levels, precipitating the desire to issue Version 4.0.¹ DOE also issued a new test procedure to be used in calculating compliance with their current energy conservation standard.² We greatly appreciate the stakeholder outreach that ENERGY STAR has done throughout this process, including the webinar held in mid-February. The industry also appreciates ENERGY STAR updating their specification in Draft 2 to make it more attainable than Draft 1.

Our position has not changed regarding the challenges the industry faces transitioning to low GWP refrigerants and the need to defer implementing a new specification until January 2022. However, we are supportive of discussing a stair-step approach that is reasonable in nature and attainable until such time as the issue surrounding the use of low GWP refrigerants are resolved.

### State Regulatory and Marketplace Challenges

Since the issuance of Draft 2 on December 28, 2018, a California Air Resources Board regulation has become effective banning the sale of new refrigerated vending machines using certain refrigerants, into their state. Specifically, this restriction bans vending machines manufactured after December 31, 2018

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<sup>&</sup>lt;sup>1</sup> https://www.energy.gov/sites/prod/files/2015/12/f27/BVM%20Final%20Rule.pdf

<sup>&</sup>lt;sup>2</sup> https://www.energy.gov/sites/prod/files/2015/07/f24/beverage vending machine tp finalrule.pdf



that utilize HFC refrigerants in the State of California.<sup>3</sup> In addition to this California regulation even more pressure has been placed on the industry with similar legislation being introduced in the State of Washington and consideration for legislation in several other states.<sup>4</sup> These state actions impose real-life hardship on the industry. In addition, the placement restrictions from Underwriters Laboratory (UL) and The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standards puts an undue burden on the industry, especially many small businesses, which make up a majority of vending machine company owners and operators. This impact on small businesses should be considered by ENERGY STAR when setting their specification as well as the fact that the industry cannot build different machines for different states or regions and be economically viable.

## **Data Accuracy and DOE Test Procedure Impacts**

Upon detailed review of the data<sup>5</sup> being used by ENERGY STAR to set this specification, as well as determining beverage vending machine models that currently meet the DRAFT 2 specification levels, NAMA believes there may be a flaw in the data. NAMA would request clarification and resolution on questions of accuracy on the below issues before proceeding forward with the specification setting process. This must be done to ensure that the data being used is accurate and applicable to this process.

- The Class A dataset includes ENERGY STAR certified products and the DOE's Compliance Certification Database for Refrigerated Beverage Vending Machines as of June 2018, including manufacturer and brand data. It appears that at least 8 of the 19 machines included in this dataset reference a testing date from DOE prior to the date when the current test procedure was established. Therefore, it is highly likely that the test results used in this dataset were derived using an outdated DOE test procedure and possibly overstate the number of machines that would comply with the specification set forth in Draft 2.
- 2) The Class B dataset includes ENERGY STAR certified products and the DOE's Compliance Certification Database for Refrigerated Beverage Vending Machines as of June 2018, including manufacturer and brand data. It appears that at least 11 of the 14 machines included in this dataset reference a testing date from DOE prior to the date when the current test procedure was established. Therefore, it is highly likely that the test results used in this dataset were derived using an outdated DOE test procedure and possibly overstate the number of machines that would comply with the specification set forth in Draft 2.
- 3) At least one of the referenced vending machines is refrigerated using CO2 and is no longer in production. ENERGY STAR should verify that all equipment in the dataset is still in production if it is relying on this data to set and justify specification levels.
- 4) There are a very limited number of R290 machines, included in the Class A and Class B datasets, therefore limiting availability of products eligible to be sold into the State of California that would meet the ENERGY STAR specification. Furthermore, if they do meet the ENERGY STAR specification they likely would not be able to be placed in traditional locations for vending machines due to the UL and ASHRAE placement restrictions. ENERGY STAR should verify the number of R290 machines in the dataset and the impact their percentage has on all qualifying equipment. Use of R290 currently impacts the ability to place them in places of ingress or egress, greatly reducing the

<sup>&</sup>lt;sup>3</sup> https://www.arb.ca.gov/regact/2018/casnap/fsorcasnap.pdf

<sup>4</sup> http://lawfilesext.leg.wa.gov/biennium/2019-20/Pdf/Bills/House%20Bills/1112.pdf#page=1

<sup>&</sup>lt;sup>5</sup> https://www.energystar.gov/products/spec/vending machines specification version 4 0 pd



likelihood that machine manufacturers will spend the resources to have them tested to meet the ENERGY STAR specification, limiting the number of actual, viable machines that realistically would be in a dataset.

Not only is it important from an accuracy standpoint to verify the issues delineated above before moving forward with a specification, it is also crucial due to changes to the DOE test procedure implemented around payment mechanisms and low energy modes and the industry's understanding of DOE's focus on R290 as a future refrigerant when creating their standard.

The first issue is associated with the treatment of energy use related to the payment mechanism. Unlike the previous test procedure, the current DOE test procedure requires that the measured daily energy consumption (DEC) rating shall be determined as the sum of the measured primary daily energy consumption per day and the default payment mechanism energy consumption value (0.20 kWh/day). This adds 0.20 kWh/day to the measured energy consumption and will have a substantial impact on manufacturers being able to reach a lower ENERGY STAR energy consumption specification. This is an additional consideration on energy usage placed on the machine that was added via the test procedure over industry objections during the DOE comment period.

The second challenge relates to the changes in the test procedure related to how the low energy/power mode is calculated during the test. This change pushed even more energy consumption with a standard that may not be completely consistent with how the equipment is used when placed at a typical client location. Bottom line, these two changes to the test procedure are already driving significantly more energy savings and should be taken into consideration by ENERGY STAR when looking at setting its specification.<sup>6</sup>

We believe that the changes that DOE made in its test method and in setting its current energy conservation standards were in anticipation of the industry transitioning to R290 refrigerant, without disruption, which is clearly not the current state. We ask that ENERGY STAR proactively reach out to DOE to work more closely together in the setting of this specification to ensure that ENERGY STAR is fully briefed on the background, justification and reasoning for the above-referenced energy conservation procedures and standards.

# **Additional Comments on Specific Sections of Draft 2 Specification**

Section 1.C - Definitions

Food Vending Machine:

NAMA agrees with the Agency that due to the absence of a test procedure and minimal market share of these products it's not the right time to expand the ENERGY STAR scope to include these products. NAMA

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<sup>&</sup>lt;sup>6</sup> Prior to the current test procedure, the stand-by power was not measured. Stand-by power is very minimal in vending machines. Pursuant to the current regulations, manufacturers must include a set amount of power to the machines energy usage, rather than allowing manufacturers to measure their stand-by energy. This takes away the incentive to reduce stand-by power and makes it even more difficult to achieve even the MEPS levels, let alone qualify for the EPA ENERGY STAR qualified products list



also agrees with EPA in their proposal to change the term from 'Food Vending Machine' to 'Refrigerated Food Vending Machine' which suggests the food product is perishable.

#### Section 2. Scope

NAMA understands and appreciates the EPA's note regarding aligning with DOE's introduction of requirements for new Combination A and Combination B machines in the federal minimum standards. However, NAMA also understands the concern raised by at least one industry stakeholder around basing the proposed levels on a modeling approach as opposed to a testing performance data. NAMA would request that the final levels for Combination A and Combination B machines mirror those for Class A and Class B machines.

### Section 3. Certification Criteria

NAMA reiterates, incorporates and accentuates issues raised in our initial comments around the serious challenges the industry is facing regarding the placement restrictions for refrigerated beverage vending machines operating with low-Global Warming Potential (GWP) refrigerants, classified as A2 or A3, such as R290. Since the date of our comments on Draft 1 of this proposal the situation has become even more punctuated and impactful. As stated earlier, on January 1, 2019, a regulatory restriction became effective in the State of California banning the sale of new vending machines using R134A as a refrigerant. When combining this limitation and the UL and ASHRAE restriction on placement of vending machines using R290 the industry is suffering. This is a dramatic restriction on sales of new vending machines into the state of California, nearly putting it at a standstill. This impact should not be ignored when setting this ENERGY STAR specification.

The industry is working tirelessly to resolve issues around refrigerated beverage vending machines operating with low-Global Warming Potential (GWP) refrigerants and limiting their placement from places of ingress or egress including lobbies and hallways. As you well know, these are the primary locations for many vending machines.

We appreciate the EPA listening to stakeholder and industry concerns related to serious challenges related to the refrigerant issues and limitations on placement and revising the Draft 1 levels to less stringent MDEC levels in Draft 2. We also appreciate ENERGY STAR's acknowledgement in Draft 2 of our challenges around R290 refrigerated machines by agreeing to work closely with stakeholders to watch the market response to issues such as placement and mitigation technology associated with use of alternative refrigerants to ensure ENERGY STAR remains a credible, leadership mark by revising the specification in the future should it be appropriate.

We understand and agree with the EPA's position that these restrictions have been formalized by other agencies or governing bodies and not this agency. However, that doesn't dismiss the fact that this is a tremendous business burden to stakeholders, many of them small businesses. The EPA should take this fact into consideration in a much larger way to protect the stakeholders as well as the credibility of the ENERGY STAR leadership mark. The stakeholders we represent are eager to work together to protect the ENERGY STAR program and the industry, but we cannot do it in a vacuum, ignoring the current business climate which includes significant economic, political and regulatory pressures as well as safety standards. We don't have the ability to avoid, ignore or reject any of these pressures.



# **Regulatory Flexibility Act**

The convenience services industry is comprised of a majority of small businesses. We understand that ENERGY STAR is a voluntary program; however we believe that moving forward on this specification, without a comprehensive review of the overall situation would have a negative impact on many small businesses across the country by impeding the ability to purchase machines to place in government buildings, universities and other commercial buildings that require Energy Star compliant equipment.

The Regulatory Flexibility Act of 1980, 5 U.S.C. 603, requires the preparation of an initial regulatory flexibility analysis for every rule which by law must be proposed for public comment, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. A regulatory flexibility analysis examines the impact of the rule on small entities and, if the impact is significant and widespread, the analysis considers alternate ways of reducing negative impacts. This proposed specification will have a significant economic impact on a substantial number of small entities, specifically the small owner and operator of vending machine companies. Therefore, NAMA request that ENERGY STAR comply with requirements of the Regulatory Flexibility Act regarding this proposed specification.

### **Conclusion and Recommendation**

EPA's Draft 2 proposed amended levels for Class A and Combination A machines of 7% more stringent than the DOE standard, and Class B and Combination B machines of 12% more stringent than the DOE standard, as presented in Section 3.A.a-d. We would ask the EPA to closely review the data sources used to establish these improvement levels to ensure that they reflect the reality of the current condition. Further, we would ask that EPA give full consideration to impact of the changes made to the current DOE test procedure and the impact these changes alone have had on energy efficiency improvement when considering the new ENERGY STAR levels.

While we appreciate the amended levels, we would seek further assistance from the EPA by postponing the application of the amended levels until 2022 when we expect to have a clearer picture of the energy requirements needed to *safely* transition away from R134a to a low-Global Warming Potential (GWP) refrigerant, classified as A2 or A3, such as R290. However, if ENERGY STAR determines that a postponement cannot be granted, we implore EPA to work with stakeholders to determine appropriate, attainable MDEC levels, in the current business climate, that could be implemented in a stair-step approach with less stringent levels in the beginning that would become more stringent between date of finalizing of this specification and completely reassessed when the industry resolves issues such as machine placement and mitigation technology associated with use of alternative refrigerants or in 2022, whichever is sooner. We believe the stair-step approach is a good faith industry effort to create a middle ground that recognizes the importance of the ENERGY STAR leadership mark and the industry's and stakeholder's real-life challenges in the marketplace.

As a reminder, our industry has a positive track record of working with ENERGY STAR to protect the value of its mark and program, which is important to our industry, energy conservation, consumers and the environment. Further, most of our machine manufacturers value their partnership with ENERGY STAR's voluntary program. Our intent is to continue that positive working relationship but also to work within the factors that impact us in the marketplace. Quite simply, we need more time. Thank you very much for the opportunity to share our thoughts and we would welcome any questions on the topic and look



forward to talking further should you have an interest in a stair-step approach to reducing energy consumption in refrigerated beverage vending machines.

Sincerely,

WA

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